MEDICAL RESOURCES • RESSOURCES MEDICALES

Toward integrated medical resource policies for Canada: 2. Promoting change — general themes

Greg L. Stoddart, PhD; Morris L. Barer, PhD

♦ his is the second in a series of articles dealing with the report Toward Integrated Medical Resource Policies for Canada,* prepared for the Federal/Provincial/Territorial Conference of Deputy Ministers of Health.1-3 The first article4 concerned the process by which the report was prepared and the policy issues identified by stakeholders. Here, we describe general themes that repeatedly emerged during the preparation of the report. Some themes pertain to underlying structural deficiencies in the current system, some arise from the need for a more realistic view of the breadth or depth of the policy issues, and others are general principles or values that seem to us to be integral to a coherent approach to policy development. The themes underpin the analysis and inform the recommendations that will be discussed in subsequent articles. Eleven themes are discussed in the report.

- There needs to be a clear statement of the objectives of physician resource policy that is agreed on by all those who set or influence policy.
- There is no optimum number of physicians in any absolute technical sense that could be a direct and practical guide for policy, because ultimately this is not a technical but a social matter.
- *The full report (in two volumes) is available for \$75 (including postage and GST) from Barbara Moore, Centre for Health Services and Policy Research, University of British Columbia, at the reprint requests address, fax (604) 822-5690, or from Lynda Marsh, Centre for Health Economics and Policy Analysis, McMaster University, Rm. 3H26, Health Sciences Centre, 1200 Main St. W, Hamilton, ON L8N 3Z5, fax (416) 546-5211.

- The heavy focus on policies at the macro level has tended to obscure the crucial importance of the decisions made every day by physicians at various stages of their careers and the incentives influencing them when they make those decisions.
- The complexity of problems and the linkage between them must be acknowledged and respected during the planning for any policy change.
- A national strategy is probably not feasible. Nationally coordinated provincial or territorial policies built on a commonly understood policy objective and framework may be.
- It may be more practical to view certain problems as manageable rather than solvable. The geographic maldistribution of physicians is a good example of this.
- Academic medical centres are in urgent need of reform to align their governance, explicit roles and funding more precisely with their mission in universities and to halt their evolving role as trade schools increasingly reliant on service funds for operation and slow to respond to changing social needs.
- Long-term planning relating to the number and mix of health care personnel can only occur once the future role of the physician is better articulated. In Canada physicians operate under a social contract to serve the population's medical needs. A more explicit definition of society's expectations of medicine would guide policy on health care personnel and reduce uncertainty for the personnel themselves.
- Effectiveness whether an intervention does more good than harm or than no treatment is

Dr. Stoddart is professor, Centre for Health Economics and Policy Analysis and Department of Clinical Epidemiology and Biostatistics, McMaster University, Hamilton, Ont; he is also a fellow of the Population Health Program, Canadian Institute for Advanced Research. Dr. Barer is director, Centre for Health Services and Policy Research, and professor, Department of Health Care and Epidemiology, University of British Columbia, Vancouver; he is also an associate of the Population Health Program, Canadian Institute for Advanced Research.

Reprint requests to: Dr. Morris L. Barer, Centre for Health Services and Policy Research, University of British Columbia, 429-2194 Health Sciences Mall, Vancouver, BC V6T 1Z3

agreed on by all parties to be the primary guiding criterion in all aspects of physician resource policy. New policies on accountability, funding, training and management in this sector must take account of effectiveness.

- Cooperative solutions to problems in physician resources require reconciliation of competing professional and political ideologies regarding the manner in which physicians, as private participants, fit into a publicly financed system. Progress in this direction may be aided by additional incentives that make the accountability of physicians to collective public objectives more explicit.
- The public will play an important role, directly or indirectly, in supporting and approving any significant policy change in this sector. However, the information it receives often does not provide a clear picture of our current knowledge of the effectiveness and efficiency of medical care and may lead the public to have unrealistic expectations.

We comment in more detail on the first two of these themes.

Objectives of physician resource policy

The different aspects of physician resource policy (e.g., training, licensure, remuneration, regulation and quality assurance) have typically been addressed in isolation, in part because policy control and influence are distributed both *de jure* and *de facto* among a number of parties. This may explain why we were unable to find a statement of overall policy objectives in this sector. We therefore offer the following statement: The overriding objective of physician resource policy should be to satisfy the health needs of the population that can most efficiently be met by people trained as physicians, subject to decisions by the population about the resources it is willing to commit to meeting those needs. The statement has a number of implications.

- Within a health care system that is largely publicly financed decisions about resource allocation must satisfy requirements for public accountability, promotion and protection of public health, and fiscal responsibility.
- The regulatory, organizational and financial structures and instruments bearing on the delivery of physician services should promote the efficient and equitable provision of effective clinical services, the assurance of quality care, and fair and equitable remuneration to all providers of services.
- Health care needs should be defined in the context of current knowledge about effective clinical interventions and the capacity to benefit from intervention; physician resource policy should ensure the availability of physicians who can be involved in research that expands the boundaries of effective

698

clinical interventions and our knowledge about the determinants of health.

- Enough people with appropriate MD and postgraduate training should be available to satisfy clinical and research training needs and associated administrative needs.
- Given that health needs and the supply of physicians and other health care personnel are dynamic, physician resource policy must be flexible.

The statement of objectives treats physician resources as one sector or subsystem of the health care system; this in turn is but one determinant of the population's health. The policy objectives in this sector must be consistent with a broader statement of provincial (the term will be used to include territories) and national health care goals. Such goals have recently been stated by several provinces as well as the federal government. We believe that the objectives of physician resource policy offered fit into the broader goals of health care policy and health policy; they focus attention on what society hopes to accomplish through the training and support of physicians.

The objectives obviously contain some value judgements, but consultations across the country lead us to believe that they are judgements shared by most parties. How and by whom further judgements of need, effectiveness, efficiency, appropriateness and equity will be made and a willingness to commit resources will be shown are perhaps the most difficult, yet central, issues requiring agreement if long-standing impasses in this sector are to be resolved. As one interviewee remarked, "The principles are sound, but the structures for achieving them are a shambles."

No optimum number of physicians

It is important to state unequivocally at the outset that there is no technically correct or optimum number of physicians. A vivid illustration of this was provided by a recent international conference on health resources⁷ sponsored by the World Health Organization and several other agencies, at which representatives of 13 countries assessed the adequacy of their supply of physicians in 1985. Although the number of physicians per 100 000 population ranged from 8 to 228, only one country (Sri Lanka, with 8) felt that it had a physician shortage. Moreover, Pakistan and India (with 27 and 36 respectively) reported surpluses, whereas Cuba (with 228) assessed its supply as adequate. (The figure given for Canada was 166.)

In our view the past and continuing debate over the "right" or "optimum" number of physicians (or physician:population ratio) has not been constructive, has perpetuated the myth that better data or methodologies will resolve disagreements and has impeded a long overdue refocusing of attention on more fundamental and logically prior decisions about the goals and structure of the health care system itself. Whether by design or default this debate has frequently led to "analysis paralysis." Although there is clearly room for improvement in the quality of the data on various relevant factors the sources of disagreement on the appropriate size and growth of the physician stock are rooted much more deeply. If the issue were primarily a technical exercise the lack of consensus would have have been easier to resolve.

A number of basic social judgements affecting the supply of physicians must be made in any health care system. The three most fundamental ones concern the share of resources that will be devoted to health care, which and whose needs will be met and which delivery models will be used to provide services. (Elsewhere8 we have stressed the importance of adopting health services rather than physicians as the initial unit of analysis in health resource planning, precisely because it focuses attention on the choice of delivery models and arrangements.) All three concerns are important, interrelated elements of the context in which medicine is practised and services are delivered. Decisions in favour of a larger resource commitment, the social legitimization of broader or deeper medical needs or more physician-intensive delivery models would presumably raise the "optimum" number of physicians.

The historical focus on optimum physician:population ratios does not seem to have been particularly useful in policy formulation, although in a crude fashion this approach may monitor trends in the overall availability of physicians. The problems with these ratios are well known:9-11 they mask more than they reveal, unless they are disaggregated by specialty and geographic area. Even then, of course, they may reflect different regional or local delivery models that are very effective for the populations they serve. Moreover, physician:population ratios tell little, if anything, about patterns of utilization of physician services and their relation to either effectiveness or need.

The use of ratios as normative standards has been a particularly frustrating experience for policy-makers. Stakeholders can easily make the "optimum" ratio into a moving target: today it is x, but when we arrive at x it will be y (usually a ratio that calls for more physicians). Things have changed; new concerns have surfaced; trends have emerged that must be included in the analysis; other countries' ratios are still better than ours. The concerns and trends are real, and the responses of policymakers throughout the system who acquiesce in further

increasing the availability of physicians are understandable because of the need to preserve current budgets and power and to be "better safe than sorry."

The numbers themselves are reasonably straightforward, even allowing for disputes over accuracy¹² and different selection criteria. 13 In 1964 the number of people served per civilian physician (including interns and residents) was about 775. The number has steadily decreased to the current 455.14,15 (Without interns and residents the ratio would have changed from about 1:900 to 1:525). The growth rate in the number of active civilian physicians has exceeded the rate of population growth each year from 1952. Although in 1964 many agreed with Justice Emmett Hall¹⁶ that given the soon-to-beintroduced national health insurance Canada was undersupplied with physicians, many would contend that Canada is now oversupplied. They frequently point out that Hall's own normative standard and the policy justification for the major expansion of Canadian medical school capacity between 1966 and 1972 (a capacity that remains intact today) was a physician:population ratio of 1:857! All of this vividly illustrates the trouble with ratios as planning norms.

We suggest that planners and others seeking to answer the question Do we have too many or too few physicians? do so through a sequence of questions.

- Are Canadians receiving the services that they need and can most benefit from?
- Are the services of high quality (i.e., effective)?
 - Are the services being provided efficiently?
- What do the answers to these three questions imply about the selection, training, supply, distribution and support of future physicians?

Questions such as these need to be faced at national and provincial levels and in specific local or regional contexts. Sensitivity to varying patterns of need and supply is an essential component of any planning framework. Furthermore, we must keep in mind that the ultimate goal of physician resource policy development — as for policy development in all areas of the health care system — is not to save money but, rather, to improve the health of Canadians.

There is no one magic physician:population ratio or optimum number of physicians other than the one that a fully informed public is willing to support. The search is not for a global ideal, just for better decision making.

In the next article we will expand on the third and fourth themes in describing an analytic framework for the discussion of management policies on physician resources. We thank Jonathan Lomas for his valuable assistance with the parts of the main report discussed in this article.

References

- Barer ML, Stoddart GL: Toward Integrated Medical Resource Policies for Canada. Prepared for the Federal/Provincial/Territorial Conference of Deputy Ministers of Health, 1991
- Idem: Toward Integrated Medical Resource Policies for Canada: Background Document, University of British Columbia (HPRU discussion paper 91:6D), Vancouver, and McMaster University (CHEPA working paper 91-7), Hamilton, Ont, 1991
- 3. Idem: Toward Integrated Medical Resource Policies for Canada: Appendices, University of British Columbia (HPRU discussion paper 91:7D), Vancouver, and McMaster University (CHEPA working paper 91-8), Hamilton, Ont, 1991
- Idem: Toward integrated medical resource policies for Canada: 1. Background, process and perceived problems. Can Med Assoc J 1992; 146: 347-351
- Lalonde M: A New Perspective on the Health of Canadians (white paper), Govt of Canada, Ottawa, 1974
- Evans RG, Stoddart GL: Producing health, consuming health care. Soc Sci Med 1990; 31 (12): 1347-1363
- Bankowski Z: A wasteful mockery. World Health 1987; Apr: 3-4

- Lomas J, Barer ML, Stoddart GL: Physician Manpower Planning: Lessons from the McDonald Report, Ont Economic Council, Toronto, 1985
- Migué JL, Belanger G: The Price of Health, Macmillan, Toronto, 1974
- 10. Committee on Physician Resources: Canadian Physician Resources: Concepts and Strategies for a Rational Approach to Physician Resource Planning, CMA, Ottawa, 1989
- Adams O, Wood A: Physician Resource Planning the "Adjusted Service Target Approach": a Suggested Pilot Project, prepared for the Royal College of Physicians and Surgeons of Canada, Ottawa, 1990
- 12. Gainor C: MDs' manpower figures differ by 20% from "flawed" government numbers. Med Post 1988; 24 (35): 1, 15
- Barer ML, Wong Fung P, Hsu D: Referral patterns, full-time equivalents and the "effective" supply of physician services in British Columbia. In Boan JA (ed): Second Canadian Conference on Health Economics, U of Regina, Regina, 1984: 285-336
- 14. Barer ML, Evans RG: Prices, proxies and productivity: an historical analysis of hospital and medical care in Canada. In Diewert E, Montmarquette C (eds): Price Level Measurement: Proceedings from a Conference Sponsored by Statistics Canada, Min Supply and Services, Ottawa, 1983
- 15. Health Personnel in Canada, 1988, Health Information Division, Dept of National Health and Welfare, Ottawa, 1990
- Hall EM (chmn): Royal Commission on Health Services, Queen's Printer, Ottawa: 1964-65

Conferences continued from page 682

Other Conferences • Conférences diverses

Mar. 25-27, 1992: 10th Anniversary National Health Care Management Conference — Celebrating You: the Professional

Four Seasons Hotel, Toronto

Business and Industry Services, Humber College, 205 Humber College Blvd., Etobicoke, ON M9W 5L7; (416) 675-5077, fax (416) 675-0135

Apr. 3-6, 1992: Sports and Cardiovascular Nutritionists (SCAN) (a practice group of the American Dietetic Association) 9th Annual Symposium — Winning Strategies in Sports Nutrition

Westin Hotel, Indianapolis

Annette Warpeha, 3M-233 E 69th St., New York, NY 10021; (212) 772-0901

Apr. 4, 1992: Acute Care Medicine Course Ramada Inn, Burnside Industrial Park, Dartmouth, NS Ms. Diane Smith, education coordinator, Dartmouth General Hospital, 325 Pleasant St., Dartmouth, NS B2Y 4G8; (902) 465-8518

Apr. 4, 1992: Allergy Update 1992 — 9th Annual Symposium for the Practising Physician (cosponsored by the Ontario Allergy Society and the Ontario Medical Association)

Four Seasons Hotel, Toronto Dr. M. Krajny, 204-3601 Victoria Park Ave., Scarborough, ON M1W 3Y3; (416) 499-2716 Apr. 6-7, 1992: 14th Annual Drugs and Geriatric Care Conference

King Edward Hotel, Toronto

Linda MacDonald, program coordinator, Business and Industry Services, Humber College, 205 Humber College Blvd., Etobicoke, ON M9W 5L7; (416) 675-3111, ext. 4621

Apr. 9-11, 1992: Pregnancy and Infant Loss: Is Coping Enough? (cosponsored by the University of Toronto Perinatal Complex and Bereaved Families of Ontario)
Sheraton Centre, Toronto
Margaret McGovern, Bereaved Families of Ontario, (416) 440-0290

Apr. 10-11, 1992: Exercise and Health Symposium (sponsored by Dalhousie University)
Halifax Hilton
Virginia Brown or Sheila Gies, Kerbel Health Care Group, 602-40 Holly St., Toronto, ON M4S 3C3; (416) 489-1414, fax (416) 489-9940

Apr. 11, 1992: 2nd Annual "Five Chiefs Family Medicine Clinic Day" (joint venture by Centenary, Markham Stouffville, North York General, Scarborough General and Scarborough Grace hospitals)

Sheraton Parkway Hotel, Richmond Hill, Ont. Gayle Willoughby, conference coordinator, North York General Hospital, 116-4001 Leslie St., North York, ON M2K 1E1; (416) 756-6538, fax (416) 756-6740

continued on page 712